

APPENDIX E-3

Dredged Material Disposal Costs for Various Alternatives

Prepared by

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Distances and Unit Costs by Harbor

Navigation Project or Harbor	Typical CY Project	New London Disposal Site		Cornfield Shoals Disposal Site		Central Long Island Disposal Site		Milford Disposal Site		Bridgeport Disposal Site		Western Long Island Sound Disposal Site		HARS Disposal Site		Rhode Island Sound Site - Typical	
		Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard
Watch Hill Cove, RI	50,000 CY	9.8	\$16.38	20.5	\$17.82	40.6	\$28.12	46.3	\$29.26	53.3	\$30.44	64.3	\$31.91	116.3	\$41.45	27.1	\$20.72
	26,000 CY		\$23.00		\$24.74		\$28.99		\$30.30		\$31.92		\$34.45		\$45.44		\$26.25
Little Narragansett Bay & Pawcatuck River (CT & RI)	100,000 CY	12.8	\$15.28	23.5	\$16.35	43.6	\$19.08	49.3	\$20.79	56.3	\$21.84	67.3	\$23.15	119.3	\$29.90	30.1	\$17.01
	75,000 CY		\$17.71		\$19.14		\$22.29		\$22.58		\$23.23		\$24.20		\$30.57		\$20.01
	50,000 CY		\$16.74		\$19.14		\$28.72		\$29.86		\$30.84		\$32.77		\$41.90		\$22.06
	26,000 CY		\$23.51		\$25.43		\$29.68		\$30.99		\$32.61		\$35.21		\$46.02		\$26.94
Stonington Harbor (CT)	100,000 CY	7.9	\$14.58	18.6	\$15.86	38.7	\$17.87	44.4	\$19.32	51.4	\$21.19	62.4	\$22.65	114.4	\$29.16	25.2	\$16.52
	75,000 CY		\$16.77		\$18.48		\$21.16		\$21.92		\$22.79		\$23.77		\$29.92		\$19.36
	50,000 CY		\$16.15		\$17.43		\$27.22		\$28.88		\$30.19		\$31.65		\$41.16		\$19.89
	26,000 CY		\$22.27		\$24.40		\$28.60		\$29.86		\$31.48		\$34.02		\$45.08		\$25.82
Mystic Harbor, CT	75,000 CY	6.9	\$16.51	17.6	\$18.35	37.7	\$21.03	43.4	\$21.79	50.4	\$22.70	61.4	\$23.68	113.4	\$29.79	29.1	\$19.88
	50,000 CY		\$16.03		\$17.31		\$26.62		\$28.68		\$30.05		\$31.52		\$41.01		\$21.60
	26,000 CY		\$21.88		\$24.25		\$28.40		\$29.63		\$31.25		\$33.78		\$44.88		\$26.72
NF Noank Harbor (West Cove)	26,000 CY	4.6	\$21.00	15.3	\$23.89	35.4	\$27.96	41.1	\$29.10	48.1	\$30.72	59.2	\$33.28	111.1	\$44.44	26.8	\$26.18
NF Mumford Cove & Groton Long Point	26,000 CY	3.8	\$20.69	14.5	\$23.77	34.6	\$27.81	40.3	\$28.92	47.3	\$30.53	58.3	\$33.07	110.3	\$44.29	28.2	\$26.51
NF Pine Island Harbor and Baker Cove	100,000 CY	3.3	\$13.66	13.5	\$15.35	33.5	\$17.35	39.3	\$17.93	46.3	\$19.89	57.3	\$21.97	109.2	\$28.38	33.1	\$17.31
	75,000 CY		\$15.55		\$17.80		\$20.47		\$21.24		\$22.17		\$23.32		\$29.23		\$20.41
	50,000 CY		\$15.60		\$16.82		\$24.10		\$27.58		\$29.26		\$30.97		\$40.38		\$23.86
	26,000 CY		\$20.50		\$23.62		\$27.60		\$28.71		\$30.30		\$32.84		\$44.08		\$27.52
New London Harbor	1,000,000 CY	4.6	\$7.78	14.6	\$8.41	34.7	\$10.48	40.5	\$10.97	47.5	\$11.88	58.5	\$12.99	110.4	\$18.21	44.5	\$11.49
	750,000 CY		\$7.98		\$8.63		\$10.64		\$11.13		\$12.07		\$13.16		\$18.24		\$11.67
	500,000 CY		\$10.77		\$11.48		\$13.03		\$14.24		\$14.80		\$15.45		\$23.16		\$14.56
	250,000 CY		\$11.17		\$11.97		\$13.93		\$15.24		\$15.80		\$16.45		\$22.26		\$15.56
	100,000 CY		\$13.92		\$15.46		\$17.47		\$18.15		\$20.25		\$22.13		\$28.56		\$19.35
	75,000 CY		\$15.89		\$17.95		\$20.63		\$21.40		\$22.33		\$23.42		\$29.39		\$21.93
	50,000 CY		\$15.75		\$16.95		\$24.82		\$28.10		\$29.50		\$31.13		\$40.56		\$28.90
	26,000 CY		\$21.00		\$23.78		\$27.83		\$28.96		\$30.58		\$33.12		\$44.31		\$29.88
Niantic Bay	75,000 CY	5.8	\$16.21	9.7	\$17.25	29.8	\$19.97	35.5	\$20.73	42.5	\$21.67	53.5	\$22.98	105.5	\$28.73	45.7	\$22.09
	50,000 CY		\$15.90		\$16.36		\$21.91		\$25.30		\$28.50		\$30.47		\$39.83		\$29.14
	26,000 CY		\$21.46		\$22.96		\$26.88		\$27.98		\$29.42		\$31.96		\$43.37		\$30.16
Connecticut River Bar Channels																	
Saybrook Bar Entrance	50,000 CY	10.8	\$16.50	3.0	\$15.56	22.2	\$18.57	27.9	\$21.08	34.9	\$24.94	45.9	\$29.18	97.9	\$38.79	43.8	\$28.76
	26,000 CY		\$23.20		\$20.38		\$25.12		\$26.44		\$27.87		\$30.21		\$41.90		\$29.72
Saybrook Shoals	26,000 CY	11.9	\$23.37	4.1	\$20.81	23.3	\$25.38	29.0	\$26.69	36.0	\$28.08	47.0	\$30.46	99.0	\$42.12	44.9	\$29.98
Calves Island Bar	26,000 CY	13.8	\$23.66	6.0	\$21.54	25.2	\$25.82	30.9	\$27.10	37.9	\$28.44	48.9	\$30.90	100.9	\$42.48	46.8	\$30.42
Essex Shoal Channel	26,000 CY	15.4	\$23.91	7.6	\$22.15	26.7	\$26.16	32.5	\$27.40	39.5	\$28.75	50.5	\$31.27	102.4	\$42.77	48.4	\$30.78

Navigation Project or Harbor	Typical CY Project	Outer Continental Shelf Site - Block Channel		Outer Continental Shelf Site - Block Canyon		Upland Disposal Sites - Truck			Upland Disposal Site Haul by Rail to Site In Eastern PA		In-Harbor CAD Cell Disposal		Distance Miles	Cost per Cubic Yard
		Distance	Cost per	Distance	Cost per	1-Mile Haul Distance	10-Mile Haul Distance	25-Mile Haul Distance	Distance	Cost per	Distance	Cost per		
		N. Miles	Cubic Yard	N. Miles	Cubic Yard	Cubic Yard	Cubic Yard	Cubic Yard	Miles	Cubic Yard	Miles	Cubic Yard		
Watch Hill Cove, RI		36.0		86.7					286.0					
	50,000 CY 26,000 CY		\$25.60 \$28.08		\$37.67 \$39.75	\$38.59 \$51.45	\$42.59 \$55.47	\$46.59 \$59.49		\$95.79 \$108.65		\$37.92 \$50.77		
Little Narragansett Bay & Pawcatuck River (CT & RI)		39.0		89.7					282.0					
	100,000 CY		\$17.90		\$25.46	\$32.18	\$36.12	\$40.06		\$88.58		\$33.60		
	75,000 CY		\$21.20		\$26.63	\$36.21	\$40.16	\$44.11		\$92.61		\$38.40		
	50,000 CY 26,000 CY		\$27.40 \$28.65		\$37.97 \$40.33	\$38.59 \$51.45	\$42.59 \$55.47	\$46.59 \$59.49		\$94.99 \$107.85		\$37.92 \$50.77		
Stonington Harbor (CT)		34.1		84.8					275.0					
	100,000 CY		\$17.41		\$24.72	\$32.18	\$36.12	\$40.06		\$87.18		\$33.60		
	75,000 CY		\$20.55		\$25.97	\$36.21	\$40.16	\$44.11		\$91.21		\$38.40		
	50,000 CY 26,000 CY		\$24.46 \$27.71		\$37.48 \$39.38	\$38.59 \$51.45	\$42.59 \$55.47	\$46.59 \$59.49		\$93.59 \$106.45		\$37.92 \$50.77		
Mystic Harbor, CT		38.0		88.7					273.0					
	75,000 CY		\$21.07		\$26.49	\$36.21	\$40.16	\$44.11		\$90.81		\$38.40		
	50,000 CY 26,000 CY		\$26.80 \$28.46		\$37.87 \$40.13	\$38.59 \$51.45	\$42.59 \$55.47	\$46.59 \$59.49		\$93.19 \$106.05		\$37.92 \$50.77		
NF	Noank Harbor (West Cove)		35.7		86.4				272.0					
	26,000 CY		\$28.02		\$39.69	\$51.45	\$55.47	\$59.49		\$105.85		\$50.77		
NF	Mumford Cove & Groton Long Point		37.1		87.8				272.0					
	26,000 CY		\$28.29		\$39.96	\$51.45	\$55.47	\$59.49		\$105.65		\$50.77		
NF	Pine Island Harbor and Baker Cove		37.3		88.0				271.0					
	100,000 CY		\$17.73		\$25.20	\$32.18	\$36.12	\$40.06		\$86.38		\$33.60		
	75,000 CY		\$20.97		\$26.40	\$36.21	\$40.16	\$44.11		\$90.41		\$38.40		
	50,000 CY		\$26.38		\$37.80	\$38.59	\$42.59	\$46.59		\$92.79		\$37.92		
	26,000 CY		\$28.33		\$40.00	\$51.45	\$55.47	\$59.49		\$105.65		\$50.77		
New London Harbor		38.8		89.5					268.0					
	1,000,000 CY		\$10.80		\$16.10	\$20.15	\$23.91	\$27.67		\$73.75		\$18.72		
	750,000 CY		\$10.97		\$16.15	\$20.99	\$24.78	\$28.58		\$74.59		\$19.20		
	500,000 CY		\$13.94		\$20.03	\$24.34	\$28.15	\$31.96		\$77.94		\$25.92		
	250,000 CY		\$14.91		\$19.96	\$26.27	\$30.13	\$34.00		\$79.87		\$26.88		
	100,000 CY		\$17.88		\$25.43	\$32.18	\$36.12	\$40.06		\$85.78		\$33.60		
	75,000 CY		\$21.17		\$26.60	\$36.21	\$40.16	\$44.11		\$89.81		\$38.40		
	50,000 CY 26,000 CY		\$27.28 \$28.62		\$37.95 \$40.29	\$38.59 \$51.45	\$42.59 \$55.47	\$46.59 \$59.49		\$92.19 \$105.05		\$37.92 \$50.77		
Niantic Bay		40.0		90.7					264.0					
	75,000 CY		\$21.33		\$26.76	\$36.21	\$40.16	\$44.11		\$89.01		\$38.40		
	50,000 CY 26,000 CY		\$28.00 \$28.85		\$38.07 \$40.52	\$38.59 \$51.45	\$42.59 \$55.47	\$46.59 \$59.49		\$91.39 \$104.25		\$37.92 \$50.77		
Connecticut River Bar Channels														
Saybrook Bar Entrance		43.7		94.4					254.0					
	50,000 CY 26,000 CY		\$28.74 \$29.70		\$38.44 \$41.23	\$38.59 \$51.45	\$42.59 \$55.47	\$46.59 \$59.49		\$89.39 \$102.25		\$37.92 \$50.77		
Saybrook Shoals	26,000 CY	44.8	\$29.95	95.5	\$41.44	\$51.45	\$55.47	\$59.49	254.0	\$102.25		\$50.77		
Calves Island Bar	26,000 CY	46.7	\$30.39	97.4	\$41.81	\$51.45	\$55.47	\$59.49	257.0	\$102.85		\$50.77		
Essex Shoal Channel	26,000 CY	48.2	\$30.74	98.9	\$42.10	\$51.45	\$55.47	\$59.49	257.0	\$102.85		\$50.77		

Distances and Unit Costs by Harbor

Navigation Project or Harbor	Typical CY Project	New London Disposal Site		Cornfield Shoals Disposal Site		Central Long Island Disposal Site		Milford Disposal Site		Bridgeport Disposal Site		Western Long Island Sound Disposal Site		HARS Disposal Site		Rhode Island Sound Site - Typical	
		Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard
Eight Mile River	100,000 CY	18.1	\$15.81	10.6	\$15.06	29.7	\$16.97	35.5	\$17.55	42.5	\$18.75	53.5	\$21.47	105.4	\$27.81	51.4	\$21.19
	75,000 CY		\$18.41		\$17.41		\$19.96		\$20.73		\$21.67		\$22.98		\$28.72		\$22.79
	50,000 CY		\$17.37		\$16.47		\$21.87		\$25.30		\$28.50		\$30.47		\$39.81		\$30.19
	26,000 CY		\$24.32		\$23.17		\$26.85		\$27.98		\$29.42		\$31.96		\$43.35		\$31.48
Essex Harbor	75,000 CY	15.4	\$18.05	7.6	\$16.69	26.7	\$19.56	32.5	\$20.33	39.5	\$21.27	50.5	\$22.71	102.4	\$28.32	48.4	\$22.45
	50,000 CY		\$17.05		\$16.11		\$20.55		\$23.50		\$27.70		\$30.07		\$39.36		\$29.68
	26,000 CY		\$23.91		\$22.15		\$26.16		\$27.40		\$28.75		\$31.27		\$42.77		\$30.78
North Cove	250,000 CY	12.5	\$11.80	4.8	\$11.18	23.9	\$12.56	29.6	\$12.78	36.6	\$14.38	47.6	\$15.81	99.6	\$20.77	45.6	\$15.65
	100,000 CY		\$15.25		\$13.96		\$16.39		\$16.96		\$17.66		\$20.28		\$26.94		\$19.68
	75,000 CY		\$17.67		\$15.95		\$19.19		\$19.95		\$20.88		\$22.35		\$27.95		\$22.08
	50,000 CY		\$16.70		\$15.78		\$19.32		\$21.82		\$25.96		\$29.52		\$38.96		\$29.12
	26,000 CY		\$23.46		\$21.08		\$25.52		\$26.83		\$28.19		\$30.60		\$42.23		\$30.14
NF Indiantown Harbor	26,000 CY	13.1	\$23.55	3.7	\$20.65	19.7	\$24.57	25.5	\$25.88	32.5	\$27.40	43.5	\$29.65	95.4	\$41.42	44.5	\$29.88
Patchogue River	75,000 CY	15.8	\$18.11	5.9	\$16.24	18.4	\$18.45	24.1	\$19.21	31.1	\$20.15	42.1	\$21.61	93.9	\$27.19	46.7	\$22.23
	50,000 CY		\$17.10		\$15.91		\$17.41		\$19.40		\$22.66		\$28.42		\$38.39		\$29.34
	26,000 CY		\$23.97		\$21.50		\$24.37		\$25.56		\$27.13		\$29.33		\$41.13		\$30.39
Duck Island Harbor of Refuge	100,000 CY	15.5	\$15.55	5.5	\$14.10	16.8	\$15.68	22.5	\$16.25	29.5	\$16.95	40.5	\$18.15	92.3	\$25.85	46.3	\$19.89
Clinton Harbor	100,000 CY	18.5	\$15.85	8.2	\$14.64	16.1	\$15.61	21.8	\$16.18	28.8	\$16.88	39.8	\$17.98	91.7	\$25.76	49.0	\$20.70
	75,000 CY		\$18.47		\$16.85		\$18.15		\$18.91		\$19.84		\$21.31		\$26.89		\$22.53
	50,000 CY		\$17.42		\$16.18		\$17.13		\$18.39		\$21.47		\$27.88		\$38.17		\$29.80
	26,000 CY		\$24.38		\$22.38		\$24.02		\$25.03		\$26.65		\$28.81		\$40.71		\$30.92
Guilford Harbor	100,000 CY	24.0	\$16.40	13.3	\$15.33	11.5	\$15.15	17.2	\$15.72	24.2	\$16.42	35.2	\$17.52	87.3	\$25.10	54.1	\$21.55
	75,000 CY		\$19.20		\$17.77		\$17.53		\$18.29		\$19.23		\$20.69		\$26.31		\$23.03
	50,000 CY		\$19.36		\$16.80		\$16.58		\$17.26		\$19.45		\$25.12		\$37.73		\$30.55
	26,000 CY		\$25.54		\$23.58		\$23.31		\$24.18		\$25.58		\$27.92		\$39.87		\$32.10
Stony Creek	50,000 CY	26.5	\$20.46	15.7	\$17.08	8.8	\$16.26	14.5	\$16.94	21.5	\$18.26	32.5	\$23.50	84.4	\$37.44	56.5	\$30.87
	26,000 CY		\$26.12		\$23.95		\$22.62		\$23.77		\$24.96		\$27.40		\$39.31		\$32.65
NF Pine Orchard Harbor	50,000 CY	28.0	\$21.12	17.3	\$17.28	7.5	\$16.10	12.8	\$16.74	19.8	\$17.58	30.8	\$22.48	82.6	\$37.26	58.1	\$22.08
	26,000 CY		\$26.46		\$24.20		\$22.12		\$23.51		\$24.58		\$27.08		\$38.96		\$33.02
Branford Harbor	100,000 CY	31.5	\$17.15	20.8	\$16.08	7.5	\$14.50	12.3	\$15.23	19.3	\$15.93	30.3	\$17.03	81.9	\$24.29	61.6	\$22.55
	75,000 CY		\$20.20		\$18.77		\$16.67		\$17.64		\$18.57		\$20.04		\$25.59		\$23.70
	50,000 CY		\$22.90		\$17.95		\$16.10		\$16.68		\$17.52		\$22.18		\$37.19		\$31.55
	26,000 CY		\$27.21		\$24.80		\$22.12		\$23.43		\$24.51		\$26.98		\$38.83		\$33.83
NF Farm River	26,000 CY	32.2	\$27.35	21.5	\$24.96	5.6	\$21.38	10.0	\$23.08	17.0	\$24.15	28.0	\$26.46	79.6	\$38.36	62.3	\$33.99

Navigation Project or Harbor	Typical CY Project	Outer Continental Shelf Site - Block Channel		Outer Continental Shelf Site - Block Canyon		Upland Disposal Sites - Truck			Upland Disposal Site Haul by Rail to Site In Eastern PA		In-Harbor CAD Cell Disposal		Distance Miles	Cost per Cubic Yard
		Distance N. Miles	20 Nmi S Cost per Cubic Yard	Distance N. Miles	71 Nmi S Cost per Cubic Yard	1-Mile Haul Distance Cost per Cubic Yard	10-Mile Haul Distance Cost per Cubic Yard	25-Mile Haul Distance Cost per Cubic Yard	Distance Miles	Cost per Cubic Yard	Distance Miles	Cost per Cubic Yard		
Eight Mile River		51.3		102.0					259.0					
	100,000 CY		\$21.17		\$27.30	\$32.18	\$36.12	\$40.06		\$83.98		\$33.60		
	75,000 CY		\$22.78		\$28.27	\$36.21	\$40.16	\$44.11		\$88.01		\$38.40		
	50,000 CY		\$30.17		\$39.30	\$38.59	\$42.59	\$46.59		\$90.39		\$37.92		
	26,000 CY		\$31.45		\$42.69	\$51.45	\$55.47	\$59.49		\$103.25		\$50.77		
Essex Harbor		48.2		98.9					257.0					
	75,000 CY		\$22.43		\$27.85	\$36.21	\$40.16	\$44.11		\$87.61		\$38.40		
	50,000 CY		\$29.64		\$38.89	\$38.59	\$42.59	\$46.59		\$89.99		\$37.92		
	26,000 CY		\$30.74		\$42.10	\$51.45	\$55.47	\$59.49		\$102.85		\$50.77		
North Cove		45.4		96.1					254.0					
	250,000 CY		\$15.63		\$20.49	\$26.27	\$30.13	\$34.00		\$77.07		\$26.88		
	100,000 CY		\$19.62		\$26.42	\$32.18	\$36.12	\$40.06		\$82.98		\$33.60		
	75,000 CY		\$22.05		\$27.48	\$36.21	\$40.16	\$44.11		\$87.01		\$38.40		
	50,000 CY		\$29.08		\$38.61	\$38.59	\$42.59	\$46.59		\$89.39		\$37.92		
	26,000 CY		\$30.09		\$41.56	\$51.45	\$55.47	\$59.49		\$102.25		\$50.77		
NF	Indiantown Harbor	45.4		96.1					253.0					
	26,000 CY		\$30.09		\$41.56	\$51.45	\$55.47	\$59.49		\$102.05		\$50.77		
Patchogue River		48.0		98.7					250.0					
	75,000 CY		\$22.40		\$27.83	\$36.21	\$40.16	\$44.11		\$86.21		\$38.40		
	50,000 CY		\$29.60		\$38.87	\$38.59	\$42.59	\$46.59		\$88.59		\$37.92		
	26,000 CY		\$30.69		\$42.06	\$51.45	\$55.47	\$59.49		\$101.45		\$50.77		
Duck Island Harbor of Refuge		48.5		99.2					250.0					
	100,000 CY		\$20.55		\$26.88	\$32.18	\$36.12	\$40.06		\$82.18		\$33.60		
Clinton Harbor		50.2		100.9					246.0					
	100,000 CY		\$21.03		\$27.14	\$32.18	\$36.12	\$40.06		\$81.38		\$33.60		
	75,000 CY		\$22.68		\$28.12	\$36.21	\$40.16	\$44.11		\$85.41		\$38.40		
	50,000 CY		\$30.03		\$39.14	\$38.59	\$42.59	\$46.59		\$87.79		\$37.92		
	26,000 CY		\$31.20		\$42.48	\$51.45	\$55.47	\$59.49		\$100.65		\$50.77		
Guilford Harbor		53.5		104.2					242.0					
	100,000 CY		\$21.47		\$27.63	\$32.18	\$36.12	\$40.06		\$80.58		\$33.60		
	75,000 CY		\$22.98		\$28.56	\$36.21	\$40.16	\$44.11		\$84.61		\$38.40		
	50,000 CY		\$30.47		\$39.63	\$38.59	\$42.59	\$46.59		\$86.99		\$37.92		
	26,000 CY		\$31.96		\$43.12	\$51.45	\$55.47	\$59.49		\$99.85		\$50.77		
Stony Creek		57.8		108.5					238.0					
	50,000 CY		\$31.04		\$40.28	\$38.59	\$42.59	\$46.59		\$86.19		\$37.92		
	26,000 CY		\$32.95		\$43.94	\$51.45	\$55.47	\$59.49		\$99.05		\$50.77		
NF	Pine Orchard Harbor	59.3		110.0					237.0					
	50,000 CY		\$22.24		\$40.50	\$38.59	\$42.59	\$46.59		\$85.99		\$37.92		
	26,000 CY		\$33.30		\$44.23	\$51.45	\$55.47	\$59.49		\$98.85		\$50.77		
Branford Harbor		62.9		113.6					234.0					
	100,000 CY		\$22.72		\$29.04	\$32.18	\$36.12	\$40.06		\$78.98		\$33.60		
	75,000 CY		\$23.81		\$29.81	\$36.21	\$40.16	\$44.11		\$83.01		\$38.40		
	50,000 CY		\$31.72		\$41.04	\$38.59	\$42.59	\$46.59		\$85.39		\$37.92		
	26,000 CY		\$34.13		\$44.92	\$51.45	\$55.47	\$59.49		\$98.25		\$50.77		
NF	Farm River	61.9		112.6					230.0					
	26,000 CY		\$33.90		\$44.73	\$51.45	\$55.47	\$59.49		\$97.45		\$50.77		

Distances and Unit Costs by Harbor

Navigation Project or Harbor	Typical CY Project	New London Disposal Site		Cornfield Shoals Disposal Site		Central Long Island Disposal Site		Milford Disposal Site		Bridgeport Disposal Site		Western Long Island Sound Disposal Site		HARS Disposal Site		Rhode Island Sound Site - Typical	
		Distance	Cost per	Distance	Cost per	Distance	Cost per	Distance	Cost per	Distance	Cost per	Distance	Cost per	Distance	Cost per	Distance	Cost per
		N. Miles	Cubic Yard	N. Miles	Cubic Yard	N. Miles	Cubic Yard	N. Miles	Cubic Yard	N. Miles	Cubic Yard	N. Miles	Cubic Yard	N. Miles	Cubic Yard	N. Miles	Cubic Yard
New Haven Harbor (Incl. Mill & Quinnipiac Rivers)	1,000,000 CY	35.5	\$10.54	24.8	\$9.48	7.7	\$7.91	11.1	\$8.10	17.8	\$8.70	28.8	\$9.96	81.2	\$15.23	65.6	\$13.66
	750,000 CY		\$10.71		\$9.64		\$8.14		\$8.35		\$8.89		\$10.12		\$15.32		\$13.79
	500,000 CY		\$13.21		\$11.90		\$11.02		\$11.27		\$11.67		\$11.98		\$18.78		\$15.91
	250,000 CY		\$14.12		\$12.59		\$11.42		\$11.69		\$12.22		\$12.75		\$19.30		\$16.90
	100,000 CY		\$17.55		\$16.48		\$14.54		\$15.11		\$15.78		\$16.88		\$24.18		\$23.04
	75,000 CY		\$20.73		\$19.31		\$16.72		\$17.48		\$18.37		\$19.84		\$25.49		\$24.05
	50,000 CY		\$25.30		\$19.71		\$16.72		\$16.53		\$17.34		\$21.47		\$37.12		\$32.20
	26,000 CY		\$27.98		\$25.72		\$22.19		\$23.25		\$24.28		\$26.65		\$38.69		\$34.77
West River	100,000 CY	35.9	\$17.59	25.2	\$16.52	8.1	\$14.62	11.5	\$15.15	18.2	\$15.82	29.2	\$16.92	80.8	\$24.12	66.0	\$23.07
	75,000 CY		\$20.79		\$19.36		\$16.83		\$17.53		\$18.43		\$19.89		\$25.44		\$24.09
	50,000 CY		\$25.54		\$19.89		\$16.77		\$16.58		\$17.38		\$21.65		\$37.08		\$32.33
	26,000 CY		\$28.06		\$25.82		\$22.35		\$23.31		\$24.34		\$26.74		\$38.62		\$34.87
Milford Harbor	100,000 CY	38.6	\$17.86	27.9	\$16.79	7.8	\$14.56	5.4	\$14.08	10.4	\$15.04	21.4	\$16.14	73.4	\$23.56	68.1	\$23.21
	75,000 CY		\$21.15		\$19.72		\$16.75		\$16.11		\$17.39		\$18.85		\$24.75		\$24.28
	50,000 CY		\$27.16		\$21.08		\$16.14		\$15.85		\$16.45		\$18.22		\$34.80		\$33.03
	26,000 CY		\$28.58		\$26.44		\$22.23		\$21.31		\$23.14		\$24.94		\$36.77		\$35.41
Housatonic River	500,000 CY	41.6	\$14.33	30.8	\$12.18	10.7	\$11.24	5.9	\$10.87	9.5	\$11.16	20.5	\$11.81	72.5	\$17.20	71.0	\$16.92
	250,000 CY		\$15.33		\$12.99		\$11.66		\$11.27		\$11.56		\$12.42		\$18.00		\$17.76
	100,000 CY		\$18.48		\$17.08		\$15.07		\$14.18		\$14.90		\$16.05		\$23.50		\$23.40
	75,000 CY		\$21.55		\$20.11		\$17.43		\$16.24		\$17.20		\$18.73		\$24.67		\$24.53
	50,000 CY		\$28.32		\$22.48		\$16.48		\$15.91		\$16.34		\$17.82		\$34.50		\$34.00
	26,000 CY		\$29.22		\$27.08		\$23.18		\$21.50		\$22.88		\$24.73		\$36.54		\$36.15
Bridgeport Harbor	1,000,000 CY	44.3	\$11.46	33.6	\$10.39	13.5	\$8.32	7.7	\$7.91	5.4	\$7.82	15.8	\$8.52	67.8	\$13.88	73.8	\$14.48
	750,000 CY		\$11.64		\$10.55		\$8.55		\$8.14		\$8.02		\$8.73		\$14.01		\$14.54
	500,000 CY		\$14.54		\$12.79		\$11.41		\$11.02		\$10.83		\$11.55		\$16.32		\$17.44
	250,000 CY		\$15.54		\$13.66		\$11.88		\$11.42		\$11.23		\$12.06		\$17.25		\$18.21
	100,000 CY		\$19.29		\$17.36		\$15.35		\$14.54		\$14.08		\$15.58		\$23.19		\$23.59
	75,000 CY		\$21.91		\$20.48		\$17.80		\$16.72		\$16.11		\$18.11		\$24.25		\$24.78
	50,000 CY		\$28.86		\$24.16		\$16.82		\$16.12		\$15.85		\$17.10		\$32.93		\$34.77
	26,000 CY		\$29.84		\$27.62		\$23.62		\$22.19		\$21.31		\$23.97		\$35.33		\$36.87
Black Rock Harbor	250,000 CY	45.6	\$15.65	34.8	\$13.95	14.7	\$11.98	9.0	\$11.52	4.7	\$11.18	14.8	\$11.98	66.8	\$17.09	75.0	\$18.40
	100,000 CY		\$19.68		\$17.48		\$15.47		\$14.80		\$13.94		\$15.48		\$23.12		\$23.67
	75,000 CY		\$22.08		\$20.64		\$17.96		\$17.07		\$15.92		\$17.97		\$24.16		\$24.89
	50,000 CY		\$29.12		\$24.88		\$16.96		\$16.28		\$15.76		\$16.98		\$32.60		\$35.33
	26,000 CY		\$30.14		\$27.85		\$23.80		\$22.69		\$21.04		\$23.82		\$35.08		\$37.18
Southport Harbor	100,000 CY	47.6	\$20.28	36.8	\$17.68	16.7	\$15.67	11.0	\$15.10	4.6	\$13.92	10.9	\$15.09	62.8	\$22.71	77.1	\$23.81
	75,000 CY		\$22.35		\$20.91		\$18.23		\$17.47		\$15.89		\$17.45		\$23.80		\$24.19
	50,000 CY		\$29.52		\$26.08		\$17.20		\$16.52		\$15.75		\$16.51		\$31.71		\$36.03
	26,000 CY		\$30.60		\$28.23		\$24.11		\$23.23		\$21.00		\$23.22		\$34.11		\$37.72
Westport Harbor and Saugatuck River	75,000 CY	50.7	\$22.73	40.0	\$21.33	19.9	\$18.65	14.2	\$17.89	7.5	\$16.67	11.5	\$17.53	63.4	\$23.86	80.3	\$25.37
	50,000 CY		\$30.09		\$28.00		\$17.59		\$16.90		\$16.10		\$16.58		\$31.79		\$37.03
	26,000 CY		\$31.32		\$28.85		\$24.60		\$23.72		\$22.12		\$23.31		\$34.25		\$38.52

Navigation Project or Harbor	Typical CY Project	Outer Continental Shelf Site - Block Channel		Outer Continental Shelf Site - Block Canyon		Upland Disposal Sites - Truck			Upland Disposal Site Haul by Rail to Site In Eastern PA		In-Harbor CAD Cell Disposal		Distance Miles	Cost per Cubic Yard
		Distance N. Miles	20 Nmi S Cost per Cubic Yard	Distance N. Miles	71 Nmi S Cost per Cubic Yard	1-Mile Haul Distance Cost per Cubic Yard	10-Mile Haul Distance Cost per Cubic Yard	25-Mile Haul Distance Cost per Cubic Yard	Distance Miles	Cost per Cubic Yard	Distance Miles	Cost per Cubic Yard		
New Haven Harbor (Incl. Mill & Quinnipiac Rivers)	1,000,000 CY	66.9		117.6		\$20.15	\$23.91	\$27.67	226.0	\$65.35		\$18.72		
	750,000 CY		\$13.79		\$18.96	\$20.99	\$24.78	\$28.58		\$66.19		\$19.20		
	500,000 CY		\$13.92		\$18.96	\$20.99	\$24.78	\$28.58		\$66.19		\$19.20		
	250,000 CY		\$16.15		\$24.24	\$24.34	\$28.15	\$31.96		\$69.54		\$25.92		
	100,000 CY		\$17.10		\$23.26	\$26.27	\$30.13	\$34.00		\$71.47		\$26.88		
	75,000 CY		\$23.13		\$29.64	\$32.18	\$36.12	\$40.06		\$77.38		\$33.60		
	50,000 CY		\$24.17		\$30.35	\$36.21	\$40.16	\$44.11		\$81.41		\$38.40		
	26,000 CY		\$32.63		\$41.64	\$38.59	\$42.59	\$46.59		\$83.79		\$37.92		
West River			\$35.10		\$45.69	\$51.45	\$55.47	\$59.49		\$96.65		\$50.77		
	100,000 CY	67.2		117.9		\$32.18	\$36.12	\$40.06	223.0	\$76.78		\$33.60		
	75,000 CY		\$23.15		\$29.69	\$36.21	\$40.16	\$44.11		\$80.81		\$38.40		
	50,000 CY		\$24.20		\$30.39	\$38.59	\$42.59	\$46.59		\$83.19		\$37.92		
	26,000 CY		\$32.73		\$41.69	\$51.45	\$55.47	\$59.49		\$96.05		\$50.77		
Milford Harbor			\$35.18		\$45.75									
	100,000 CY	69.3		120.0		\$32.18	\$36.12	\$40.06	217.0	\$75.58		\$33.60		
	75,000 CY		\$23.29		\$30.00	\$36.21	\$40.16	\$44.11		\$79.61		\$38.40		
	50,000 CY		\$24.38		\$30.67	\$38.59	\$42.59	\$46.59		\$81.99		\$37.92		
Housatonic River	26,000 CY		\$33.43		\$42.00	\$51.45	\$55.47	\$59.49		\$94.85		\$50.77		
			\$35.72		\$46.15									
	500,000 CY	72.2		122.9		\$24.34	\$28.15	\$31.96	214.0	\$67.14		\$25.92		
	250,000 CY		\$17.14		\$25.04	\$26.27	\$30.13	\$34.00		\$69.07		\$26.88		
	100,000 CY		\$17.95		\$24.06	\$32.18	\$36.12	\$40.06		\$74.98		\$33.60		
	75,000 CY		\$23.48		\$30.58	\$36.21	\$40.16	\$44.11		\$79.01		\$38.40		
	50,000 CY		\$24.64		\$30.86	\$38.59	\$42.59	\$46.59		\$81.39		\$37.92		
Bridgeport Harbor			\$34.40		\$42.44	\$51.45	\$55.47	\$59.49		\$94.25		\$50.77		
			\$36.46		\$46.71									
	1,000,000 CY	72.6		123.3		\$20.15	\$23.91	\$27.67	212.0	\$62.55		\$18.72		
	750,000 CY		\$14.36		\$19.49	\$20.99	\$24.78	\$28.58		\$63.39		\$19.20		
	500,000 CY		\$14.48		\$19.54	\$24.34	\$28.15	\$31.96		\$67.14		\$25.92		
	250,000 CY		\$17.22		\$25.10	\$26.27	\$30.13	\$34.00		\$68.67		\$26.88		
	100,000 CY		\$18.02		\$24.13	\$32.18	\$36.12	\$40.06		\$74.58		\$33.60		
	75,000 CY		\$23.51		\$30.66	\$36.21	\$40.16	\$44.11		\$78.61		\$38.40		
Black Rock Harbor	50,000 CY		\$24.68		\$30.89	\$38.59	\$42.59	\$46.59		\$80.99		\$37.92		
	26,000 CY		\$34.53		\$42.50	\$51.45	\$55.47	\$59.49		\$93.85		\$50.77		
			\$36.56		\$46.79									
	250,000 CY	71.9		122.6		\$26.27	\$30.13	\$34.00	210.0	\$68.27		\$26.88		
	100,000 CY		\$17.90		\$24.02	\$32.18	\$36.12	\$40.06		\$74.18		\$33.60		
Southport Harbor	75,000 CY		\$23.46		\$30.52	\$36.21	\$40.16	\$44.11		\$78.21		\$38.40		
	50,000 CY		\$24.61		\$30.84	\$38.59	\$42.59	\$46.59		\$80.59		\$37.92		
	26,000 CY		\$34.30		\$42.39	\$51.45	\$55.47	\$59.49		\$93.45		\$50.77		
			\$36.38		\$46.65									
Westport Harbor and Saugatuck River	100,000 CY	71.8		122.5		\$32.18	\$36.12	\$40.06	207.0	\$73.58		\$33.60		
	75,000 CY		\$23.45		\$30.50	\$36.21	\$40.16	\$44.11		\$77.61		\$38.40		
	50,000 CY		\$24.60		\$30.83	\$38.59	\$42.59	\$46.59		\$79.99		\$37.92		
	26,000 CY		\$34.27		\$42.38	\$51.45	\$55.47	\$59.49		\$92.85		\$50.77		
Westport Harbor and Saugatuck River			\$36.36		\$46.63									
	75,000 CY	74.7		125.4		\$36.21	\$40.16	\$44.11	203.0	\$76.81		\$38.40		
	50,000 CY		\$24.86		\$31.03	\$38.59	\$42.59	\$46.59		\$79.19		\$37.92		
	26,000 CY		\$35.23		\$42.81	\$51.45	\$55.47	\$59.49		\$92.05		\$50.77		
			\$37.10		\$47.19									

Distances and Unit Costs by Harbor

Navigation Project or Harbor	Typical CY Project	New London Disposal Site		Cornfield Shoals Disposal Site		Central Long Island Disposal Site		Milford Disposal Site		Bridgeport Disposal Site		Western Long Island Sound Disposal Site		HARS Disposal Site		Rhode Island Sound Site - Typical	
		Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard
Norwalk Harbor	500,000 CY	56.6	\$15.35	45.9	\$14.67	25.8	\$11.92	20.1	\$11.80	13.1	\$11.39	6.5	\$10.92	58.1	\$15.43	85.9	\$19.49
	250,000 CY		\$16.35		\$15.67		\$12.63		\$12.40		\$11.85		\$11.32		\$16.43		\$19.67
	100,000 CY		\$21.88		\$19.77		\$16.58		\$16.01		\$15.31		\$14.30		\$22.08		\$24.89
	75,000 CY		\$23.25		\$22.12		\$19.44		\$18.68		\$17.75		\$16.40		\$23.39		\$26.12
	50,000 CY		\$30.88		\$29.18		\$20.15		\$17.64		\$16.77		\$15.98		\$31.08		\$37.59
	26,000 CY		\$32.68		\$30.21		\$25.95		\$24.64		\$23.55		\$21.73		\$33.02		\$39.60
Wilson Point Harbor	100,000 CY	54.4	\$21.59	43.6	\$19.08	23.5	\$16.35	17.8	\$15.78	10.8	\$15.08	4.5	\$13.90	55.8	\$21.77	83.6	\$24.54
	75,000 CY		\$23.06		\$21.81		\$19.13		\$18.37		\$17.44		\$15.87		\$23.18		\$25.81
	50,000 CY		\$30.59		\$28.72		\$19.14		\$17.34		\$16.50		\$15.74		\$30.77		\$37.36
	26,000 CY		\$32.17		\$29.68		\$25.42		\$24.28		\$23.20		\$20.96		\$32.49		\$39.15
Fivemile River	75,000 CY	54.3	\$23.05	43.6	\$21.81	23.5	\$19.13	17.7	\$18.36	10.7	\$17.43	4.1	\$15.76	55.7	\$23.17	83.5	\$25.80
	50,000 CY		\$30.57		\$28.72		\$19.14		\$17.32		\$16.48		\$15.69		\$30.76		\$37.35
	26,000 CY		\$32.15		\$29.68		\$25.42		\$24.26		\$23.18		\$20.81		\$32.47		\$39.13
Westcott Cove	50,000 CY	56.3	\$30.84	45.6	\$29.12	25.5	\$20.02	19.7	\$17.56	12.7	\$16.72	3.3	\$15.60	53.6	\$30.48	85.5	\$37.55
	26,000 CY		\$32.61		\$30.14		\$25.88		\$24.57		\$23.49		\$20.50		\$31.98		\$39.52
Stamford Harbor	750,000 CY	60.2	\$13.31	49.5	\$12.33	29.4	\$10.19	23.6	\$9.50	16.6	\$8.79	4.1	\$7.95	52.6	\$12.63	87.5	\$15.95
	500,000 CY		\$15.54		\$14.96		\$11.99		\$11.87		\$11.60		\$10.73		\$15.14		\$19.73
	250,000 CY		\$16.54		\$15.96		\$12.78		\$12.54		\$12.13		\$11.13		\$16.14		\$19.80
	100,000 CY		\$22.36		\$20.85		\$16.94		\$16.36		\$15.66		\$13.82		\$21.35		\$25.13
	75,000 CY		\$23.57		\$22.60		\$19.92		\$19.15		\$18.21		\$15.76		\$22.90		\$26.33
	50,000 CY		\$31.36		\$29.90		\$21.74		\$19.18		\$17.19		\$15.69		\$30.35		\$37.75
Mianus River	26,000 CY		\$33.51		\$31.04		\$26.78		\$25.45		\$24.09		\$20.81		\$31.75		\$39.90
	75,000 CY	60.6	\$23.61	49.9	\$22.65	29.8	\$19.97	24.1	\$19.21	17.1	\$18.28	6.5	\$16.40	50.9	\$22.75	89.7	\$26.63
	50,000 CY		\$31.41		\$29.98		\$21.91		\$19.40		\$17.25		\$15.98		\$30.12		\$37.97
	26,000 CY		\$33.60		\$31.13		\$26.88		\$25.56		\$24.17		\$21.73		\$31.36		\$40.33
Greenwich Harbor	100,000 CY	60.6	\$22.41	49.8	\$20.94	29.7	\$16.97	24.0	\$16.40	17.0	\$15.70	6.2	\$14.24	50.8	\$21.11	89.6	\$25.44
	75,000 CY		\$23.61		\$22.64		\$19.96		\$19.20		\$18.27		\$16.32		\$22.74		\$26.61
	50,000 CY		\$31.41		\$29.96		\$21.87		\$19.36		\$17.24		\$15.94		\$30.11		\$37.96
	26,000 CY		\$33.60		\$31.11		\$26.85		\$25.54		\$24.15		\$21.62		\$31.34		\$40.31
Port Chester Harbor and Byram River NY & CT	75,000 CY	61.9	\$23.72	51.2	\$22.77	31.1	\$20.15	25.4	\$19.39	20.2	\$18.69	7.4	\$16.64	48.3	\$22.44	91.0	\$26.80
	50,000 CY		\$31.59		\$30.16		\$22.66		\$19.98		\$17.69		\$16.09		\$29.66		\$38.10
	26,000 CY		\$33.90		\$31.43		\$27.13		\$25.86		\$24.66		\$22.08		\$30.76		\$40.58
Milton Harbor	26,000 CY	65.2	\$34.67	54.5	\$32.19	34.4	\$27.77	28.6	\$26.60	21.6	\$24.98	10.6	\$23.17	45.3	\$30.07	92.7	\$40.90
Mamaroneck Harbor	500,000 CY	65.3	\$15.86	54.6	\$15.25	34.5	\$12.99	28.7	\$11.97	21.7	\$11.83	10.7	\$11.24	45.2	\$14.62	92.6	\$20.49
	250,000 CY		\$16.85		\$16.25		\$13.88		\$12.75		\$12.47		\$11.66		\$15.62		\$20.21
	100,000 CY		\$23.02		\$21.61		\$17.45		\$16.87		\$16.17		\$15.07		\$19.56		\$25.89
	75,000 CY		\$24.03		\$23.08		\$20.60		\$19.83		\$18.89		\$17.43		\$22.03		\$27.01
	50,000 CY		\$32.10		\$30.61		\$24.70		\$21.43		\$18.35		\$16.48		\$29.04		\$38.26
	26,000 CY		\$34.69		\$32.22		\$27.79		\$26.62		\$25.01		\$23.18		\$30.05		\$40.88

Navigation Project or Harbor	Typical CY Project	Outer Continental Shelf Site - Block Channel		Outer Continental Shelf Site - Block Canyon		Upland Disposal Sites - Truck			Upland Disposal Site Haul by Rail to Site In Eastern PA		In-Harbor CAD Cell Disposal		Distance Miles	Cost per Cubic Yard
		Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	1-Mile Haul Distance Cost per Cubic Yard	10-Mile Haul Distance Cost per Cubic Yard	25-Mile Haul Distance Cost per Cubic Yard	Distance Miles	Cost per Cubic Yard	Distance Miles	Cost per Cubic Yard		
Norwalk Harbor		80.3		131.0					199.0					
	500,000 CY		\$18.65		\$26.25	\$24.34	\$28.15	\$31.96		\$64.14		\$25.92		
	250,000 CY		\$19.22		\$25.36	\$26.27	\$30.13	\$34.00		\$66.07		\$26.88		
	100,000 CY		\$24.05		\$32.20	\$32.18	\$36.12	\$40.06		\$71.98		\$33.60		
	75,000 CY		\$25.37		\$31.40	\$36.21	\$40.16	\$44.11		\$76.01		\$38.40		
	50,000 CY		\$37.03		\$43.65	\$38.59	\$42.59	\$46.59		\$78.39		\$37.92		
Wilson Point Harbor	26,000 CY		\$38.52		\$48.27	\$51.45	\$55.47	\$59.49		\$91.25		\$50.77		
		78.0		128.7					198.0					
	100,000 CY		\$23.20		\$31.74	\$32.18	\$36.12	\$40.06		\$71.78		\$33.60		
	75,000 CY		\$24.27		\$31.25	\$36.21	\$40.16	\$44.11		\$75.81		\$38.40		
	50,000 CY		\$36.33		\$43.31	\$38.59	\$42.59	\$46.59		\$78.19		\$37.92		
Fivemile River	26,000 CY		\$37.95		\$47.83	\$51.45	\$55.47	\$59.49		\$91.05		\$50.77		
		77.9		128.6					196.0					
	75,000 CY		\$25.15		\$31.24	\$36.21	\$40.16	\$44.11		\$75.41		\$38.40		
	50,000 CY		\$36.30		\$43.29	\$38.59	\$42.59	\$46.59		\$77.79		\$37.92		
Westcott Cove	26,000 CY		\$37.92		\$47.81	\$51.45	\$55.47	\$59.49		\$90.65		\$50.77		
		79.9		130.6					194.0					
	50,000 CY		\$36.97		\$43.59	\$38.59	\$42.59	\$46.59		\$77.39		\$37.92		
Stamford Harbor	26,000 CY		\$38.44		\$48.19	\$51.45	\$55.47	\$59.49		\$90.25		\$50.77		
		83.8		134.5					193.0					
	750,000 CY		\$15.58		\$20.70	\$20.99	\$24.78	\$28.58		\$59.59		\$19.20		
	500,000 CY		\$19.17		\$26.78	\$24.34	\$28.15	\$31.96		\$62.94		\$25.92		
	250,000 CY		\$19.50		\$25.92	\$26.27	\$30.13	\$34.00		\$64.87		\$26.88		
	100,000 CY		\$24.57		\$32.90	\$32.18	\$36.12	\$40.06		\$70.78		\$33.60		
	75,000 CY		\$25.84		\$31.63	\$36.21	\$40.16	\$44.11		\$74.81		\$38.40		
	50,000 CY		\$37.38		\$44.18	\$38.59	\$42.59	\$46.59		\$77.19		\$37.92		
	26,000 CY		\$39.19		\$48.94	\$51.45	\$55.47	\$59.49		\$90.05		\$50.77		
		84.3		135.0					191.0					
Mianus River	75,000 CY		\$25.91		\$31.67	\$36.21	\$40.16	\$44.11		\$74.41		\$38.40		
	50,000 CY		\$37.43		\$44.25	\$38.59	\$42.59	\$46.59		\$76.79		\$37.92		
	26,000 CY		\$39.29		\$49.04	\$51.45	\$55.47	\$59.49		\$89.65		\$50.77		
Greenwich Harbor		84.2		134.9					189.0					
	100,000 CY		\$24.63		\$32.98	\$32.18	\$36.12	\$40.06		\$69.98		\$33.60		
	75,000 CY		\$25.89		\$31.66	\$36.21	\$40.16	\$44.11		\$74.01		\$38.40		
	50,000 CY		\$37.42		\$44.24	\$38.59	\$42.59	\$46.59		\$76.39		\$37.92		
Port Chester Harbor and Byram River NY & CT	26,000 CY		\$39.27		\$49.02	\$51.45	\$55.47	\$59.49		\$89.25		\$50.77		
		87.4		138.1					186.0					
	75,000 CY		\$26.32		\$31.87	\$36.21	\$40.16	\$44.11		\$73.41		\$38.40		
Milton Harbor	50,000 CY		\$37.74		\$44.72	\$38.59	\$42.59	\$46.59		\$75.79		\$37.92		
	26,000 CY		\$39.88		\$49.63	\$51.45	\$55.47	\$59.49		\$88.65		\$50.77		
		88.8		139.5					182.0					
Mamaroneck Harbor	26,000 CY		\$40.15		\$49.90	\$51.45	\$55.47	\$59.49		\$87.85		\$50.77		
		88.9		139.6					181.0					
	500,000 CY		\$19.94		\$27.54	\$24.34	\$28.15	\$31.96		\$60.54		\$25.92		
	250,000 CY		\$19.91		\$26.74	\$26.27	\$30.13	\$34.00		\$62.47		\$26.88		
	100,000 CY		\$25.34		\$33.92	\$32.18	\$36.12	\$40.06		\$68.38		\$33.60		
	75,000 CY		\$26.52		\$31.97	\$36.21	\$40.16	\$44.11		\$72.41		\$38.40		
	50,000 CY		\$37.89		\$44.94	\$38.59	\$42.59	\$46.59		\$74.79		\$37.92		
	26,000 CY		\$40.17		\$49.92	\$51.45	\$55.47	\$59.49		\$87.65		\$50.77		

Distances and Unit Costs by Harbor

Navigation Project or Harbor	Typical CY Project	New London Disposal Site		Cornfield Shoals Disposal Site		Central Long Island Disposal Site		Milford Disposal Site		Bridgeport Disposal Site		Western Long Island Sound Disposal Site		HARS Disposal Site		Rhode Island Sound Site - Typical	
		Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard
Larchmont Harbor	26,000 CY	65.5	\$34.74	54.7	\$32.24	34.6	\$27.81	28.9	\$26.67	21.9	\$25.05	10.9	\$23.22	43.3	\$29.61	92.7	\$40.90
Echo Bay	100,000 CY	66.9	\$23.13	56.2	\$21.83	36.0	\$17.60	30.3	\$17.03	23.3	\$16.33	12.3	\$15.23	42.7	\$18.81	94.1	\$26.12
	75,000 CY		\$24.17		\$23.22		\$20.80		\$20.04		\$19.11		\$17.64		\$21.69		\$27.21
	50,000 CY		\$32.63		\$30.83		\$25.60		\$22.18		\$19.05		\$16.68		\$28.54		\$38.41
	26,000 CY		\$35.10		\$32.58		\$28.08		\$26.98		\$25.38		\$23.43		\$29.47		\$41.17
New Rochelle Habror	100,000 CY	67.8	\$23.19	57.0	\$21.93	36.8	\$17.68	31.1	\$17.11	24.1	\$16.41	13.1	\$15.31	43.3	\$18.99	94.9	\$26.24
	75,000 CY		\$24.25		\$23.29		\$20.91		\$20.15		\$19.21		\$17.75		\$21.77		\$27.32
	50,000 CY		\$32.93		\$30.93		\$26.08		\$22.66		\$19.40		\$16.77		\$28.66		\$38.49
	26,000 CY		\$35.33		\$32.77		\$28.23		\$27.13		\$25.56		\$23.55		\$29.61		\$41.33
East Chester Creek	250,000 CY	71.6	\$17.86	60.8	\$16.58	40.2	\$15.22	34.5	\$13.88	27.5	\$12.70	16.5	\$12.12	40.6	\$15.25	98.7	\$20.70
	100,000 CY		\$23.44		\$22.44		\$18.06		\$17.45		\$16.75		\$15.65		\$18.18		\$26.81
	75,000 CY		\$24.59		\$23.63		\$21.36		\$20.60		\$19.67		\$18.20		\$21.41		\$27.83
	50,000 CY		\$34.20		\$31.44		\$28.04		\$24.70		\$20.90		\$17.18		\$28.12		\$38.87
	26,000 CY		\$36.31		\$33.65		\$28.89		\$27.79		\$26.35		\$24.08		\$28.98		\$42.06
West Chester Creek	100,000 CY	73.3	\$23.55	62.6	\$22.68	42.4	\$18.72	36.6	\$17.66	29.6	\$16.96	18.6	\$15.86	36.0	\$17.60	100.5	\$27.08
	75,000 CY		\$24.74		\$23.79		\$21.65		\$20.88		\$19.95		\$18.48		\$20.80		\$28.07
	50,000 CY		\$34.77		\$31.68		\$28.48		\$25.96		\$21.82		\$17.43		\$25.60		\$39.08
	26,000 CY		\$36.74		\$34.06		\$29.40		\$28.19		\$26.83		\$24.40		\$28.08		\$42.40
Bronx River	100,000 CY	74.4	\$23.63	63.7	\$22.83	43.5	\$19.05	37.7	\$17.77	30.7	\$17.07	19.7	\$15.97	35.8	\$17.58	101.6	\$27.24
	75,000 CY		\$24.84		\$23.88		\$21.80		\$21.03		\$20.09		\$18.63		\$20.77		\$28.21
	50,000 CY		\$35.13		\$31.83		\$28.70		\$26.62		\$22.42		\$17.56		\$25.48		\$39.24
	26,000 CY		\$37.03		\$34.32		\$29.65		\$28.40		\$27.06		\$24.57		\$28.04		\$42.62
Flushing Bay	250,000 CY	74.4	\$18.30	63.7	\$16.73	43.5	\$15.48	37.7	\$14.65	30.7	\$12.97	19.7	\$12.38	35.8	\$14.19	101.6	\$21.02
	100,000 CY		\$23.63		\$22.83		\$19.05		\$17.77		\$17.07		\$15.97		\$17.58		\$27.24
	75,000 CY		\$24.84		\$23.88		\$21.80		\$21.03		\$20.09		\$18.63		\$20.77		\$28.21
	50,000 CY		\$35.13		\$31.83		\$28.70		\$26.62		\$22.42		\$17.56		\$25.48		\$39.24
	26,000 CY		\$37.03		\$34.32		\$29.65		\$28.40		\$27.06		\$24.57		\$28.04		\$42.62
NF Little Neck Bay	26,000 CY	71.1	\$36.18	60.4	\$33.55	40.2	\$28.89	34.5	\$27.79	27.5	\$26.35	16.5	\$24.08	38.8	\$28.62	98.3	\$41.98
NF Manhasset Bay	100,000 CY	70.6	\$23.37	59.8	\$22.31	42.0	\$18.60	36.3	\$17.63	29.3	\$16.93	18.3	\$15.83	42.7	\$18.81	97.7	\$26.66
	75,000 CY		\$24.50		\$23.54		\$21.60		\$20.84		\$19.91		\$18.44		\$21.69		\$27.69
	50,000 CY		\$33.87		\$31.31		\$28.40		\$25.78		\$21.69		\$17.40		\$28.54		\$38.77
	26,000 CY		\$36.05		\$33.42		\$29.31		\$28.13		\$26.76		\$24.35		\$29.47		\$41.87
NF Port Washington	26,000 CY	69.7	\$35.82	58.9	\$33.21	41.1	\$29.10	35.4	\$27.96	28.4	\$26.55	17.4	\$24.22	41.8	\$29.26	96.8	\$41.69
Hempstead Harbor	100,000 CY	67.7	\$23.18	56.9	\$21.92	36.7	\$17.67	31.0	\$17.10	24.0	\$16.40	13.0	\$15.30	46.8	\$20.04	94.8	\$26.22
	75,000 CY		\$24.24		\$23.28		\$20.89		\$20.13		\$19.20		\$17.73		\$22.24		\$27.31
	50,000 CY		\$32.90		\$30.92		\$26.02		\$22.60		\$19.36		\$16.76		\$29.36		\$38.48
	26,000 CY		\$35.31		\$32.75		\$28.21		\$27.12		\$25.54		\$23.54		\$30.42		\$41.31

Navigation Project or Harbor	Typical CY Project	Outer Continental Shelf Site - Block Channel		Outer Continental Shelf Site - Block Canyon		Upland Disposal Sites - Truck			Upland Disposal Site Haul by Rail to Site In Eastern PA		In-Harbor CAD Cell Disposal		Distance Miles	Cost per Cubic Yard
		Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	1-Mile Haul Distance Cost per Cubic Yard	10-Mile Haul Distance Cost per Cubic Yard	25-Mile Haul Distance Cost per Cubic Yard	Distance Miles	Cost per Cubic Yard	Distance Miles	Cost per Cubic Yard		
Larchmont Harbor	26,000 CY	89.1	\$40.21	139.8	\$49.96	\$51.45	\$55.47	\$59.49	180.0	\$87.45		\$50.77		
Echo Bay	100,000 CY	90.5	\$25.58	141.2	\$34.24	\$32.18	\$36.12	\$40.06	179.0	\$67.98		\$33.60		
	75,000 CY		\$26.73		\$32.08	\$36.21	\$40.16	\$44.11		\$72.01		\$38.40		
	50,000 CY		\$38.05		\$45.18	\$38.59	\$42.59	\$46.59		\$74.39		\$37.92		
	26,000 CY		\$40.48		\$50.23	\$51.45	\$55.47	\$59.49		\$87.25		\$50.77		
New Rochelle Habror	100,000 CY	91.3	\$25.70	142.0	\$34.40	\$32.18	\$36.12	\$40.06	177.0	\$67.58		\$33.60		
	75,000 CY		\$26.84		\$32.13	\$36.21	\$40.16	\$44.11		\$71.61		\$38.40		
	50,000 CY		\$38.13		\$45.30	\$38.59	\$42.59	\$46.59		\$73.99		\$37.92		
	26,000 CY		\$40.63		\$50.38	\$51.45	\$55.47	\$59.49		\$86.85		\$50.77		
East Chester Creek	250,000 CY	94.7	\$20.38	145.4	\$27.66	\$26.27	\$30.13	\$34.00	174.0	\$61.07		\$26.88		
	100,000 CY		\$26.21		\$35.08	\$32.18	\$36.12	\$40.06		\$66.98		\$33.60		
	75,000 CY		\$27.29		\$32.36	\$36.21	\$40.16	\$44.11		\$71.01		\$38.40		
	50,000 CY		\$38.47		\$45.81	\$38.59	\$42.59	\$46.59		\$73.39		\$37.92		
	26,000 CY		\$41.29		\$51.04	\$51.45	\$55.47	\$59.49		\$86.25		\$50.77		
West Chester Creek	100,000 CY	96.8	\$26.52	147.5	\$35.50	\$32.18	\$36.12	\$40.06	171.0	\$66.38		\$33.60		
	75,000 CY		\$27.57		\$32.50	\$36.21	\$40.16	\$44.11		\$70.41		\$38.40		
	50,000 CY		\$38.68		\$46.13	\$38.59	\$42.59	\$46.59		\$72.79		\$37.92		
	26,000 CY		\$41.69		\$51.44	\$51.45	\$55.47	\$59.49		\$85.65		\$50.77		
Bronx River	100,000 CY	97.9	\$26.69	148.6	\$35.72	\$32.18	\$36.12	\$40.06	169.0	\$65.98		\$33.60		
	75,000 CY		\$27.72		\$32.57	\$36.21	\$40.16	\$44.11		\$70.01		\$38.40		
	50,000 CY		\$38.79		\$46.29	\$38.59	\$42.59	\$46.59		\$72.39		\$37.92		
	26,000 CY		\$41.90		\$51.65	\$51.45	\$55.47	\$59.49		\$85.25		\$50.77		
Flushing Bay	250,000 CY	97.9	\$20.63	148.6	\$28.18	\$26.27	\$30.13	\$34.00	174.0	\$61.07		\$26.88		
	100,000 CY		\$26.69		\$35.72	\$32.18	\$36.12	\$40.06		\$66.98		\$33.60		
	75,000 CY		\$27.72		\$32.57	\$36.21	\$40.16	\$44.11		\$71.01		\$38.40		
	50,000 CY		\$38.79		\$46.29	\$38.59	\$42.59	\$46.59		\$73.39		\$37.92		
	26,000 CY		\$41.90		\$51.65	\$51.45	\$55.47	\$59.49		\$86.25		\$50.77		
NF Little Neck Bay	26,000 CY	94.7	\$41.29	145.4	\$51.04	\$51.45	\$55.47	\$59.49	179.0	\$87.25		\$50.77		
NF Manhasset Bay	100,000 CY	96.5	\$26.48	147.2	\$35.44	\$32.18	\$36.12	\$40.06	181.0	\$68.38		\$33.60		
	75,000 CY		\$27.53		\$32.48	\$36.21	\$40.16	\$44.11		\$72.41		\$38.40		
	50,000 CY		\$38.65		\$46.08	\$38.59	\$42.59	\$46.59		\$74.79		\$37.92		
	26,000 CY		\$41.63		\$51.38	\$51.45	\$55.47	\$59.49		\$87.65		\$50.77		
NF Port Washington	26,000 CY	95.6	\$41.46	146.3	\$51.21	\$51.45	\$55.47	\$59.49	183.0	\$88.05		\$50.77		
Hempstead Harbor	100,000 CY	91.2	\$25.68	141.9	\$34.38	\$32.18	\$36.12	\$40.06	185.0	\$69.18		\$33.60		
	75,000 CY		\$26.83		\$32.13	\$36.21	\$40.16	\$44.11		\$73.21		\$38.40		
	50,000 CY		\$38.12		\$45.29	\$38.59	\$42.59	\$46.59		\$75.59		\$37.92		
	26,000 CY		\$40.62		\$50.37	\$51.45	\$55.47	\$59.49		\$88.45		\$50.77		

Distances and Unit Costs by Harbor

Navigation Project or Harbor	Typical CY Project	New London Disposal Site		Cornfield Shoals Disposal Site		Central Long Island Disposal Site		Milford Disposal Site		Bridgeport Disposal Site		Western Long Island Sound Disposal Site		HARS Disposal Site		Rhode Island Sound Site - Typical	
		Distance	Cost per	Distance	Cost per	Distance	Cost per	Distance	Cost per	Distance	Cost per	Distance	Cost per	Distance	Cost per	Distance	Cost per
		N. Miles	Cubic Yard	N. Miles	Cubic Yard	N. Miles	Cubic Yard	N. Miles	Cubic Yard	N. Miles	Cubic Yard	N. Miles	Cubic Yard	N. Miles	Cubic Yard	N. Miles	Cubic Yard
Glen Cove Creek	100,000 CY	66.3	\$23.09	55.6	\$21.75	35.4	\$17.54	29.6	\$16.96	22.6	\$16.26	11.6	\$15.16	45.4	\$19.62	93.5	\$26.03
	75,000 CY		\$24.12		\$23.16		\$20.72		\$19.95		\$19.01		\$17.55		\$22.05		\$27.13
	50,000 CY		\$32.43		\$30.75		\$25.24		\$21.82		\$18.74		\$16.59		\$29.08		\$38.35
	26,000 CY		\$34.95		\$32.45		\$27.96		\$26.83		\$25.22		\$23.32		\$30.09		\$41.06
NF Oyster Bay Harbor	100,000 CY	60.6	\$22.41	49.8	\$20.94	30.4	\$17.04	24.6	\$16.46	17.6	\$15.76	6.6	\$14.32	53.5	\$21.47	87.7	\$25.16
	75,000 CY		\$23.61		\$22.64		\$20.05		\$19.28		\$18.35		\$16.43		\$22.98		\$26.36
	50,000 CY		\$31.41		\$29.96		\$22.24		\$19.62		\$17.31		\$15.99		\$30.47		\$37.77
	26,000 CY		\$33.60		\$31.11		\$27.00		\$25.68		\$24.25		\$21.77		\$31.96		\$39.94
NF Cold Spring Harbor	26,000 CY	60.9	\$33.67	50.2	\$31.20	30.6	\$27.04	24.9	\$25.75	17.9	\$24.29	6.9	\$21.88	53.9	\$32.05	88.1	\$40.02
Huntington Harbor	100,000 CY	57.2	\$21.96	46.5	\$19.95	26.7	\$16.67	21.0	\$16.10	13.8	\$15.38	6.4	\$14.28	56.9	\$21.92	84.4	\$24.66
	75,000 CY		\$23.31		\$22.20		\$19.56		\$18.80		\$17.84		\$16.37		\$23.28		\$25.92
	50,000 CY		\$30.96		\$29.30		\$20.55		\$18.04		\$16.86		\$15.97		\$30.92		\$37.44
	26,000 CY		\$32.82		\$30.35		\$26.16		\$24.85		\$23.66		\$21.69		\$32.75		\$39.31
Northport Harbor	100,000 CY	58.2	\$22.09	47.5	\$20.25	27.7	\$16.77	22.0	\$16.20	14.8	\$15.48	7.4	\$14.48	57.9	\$22.05	85.4	\$24.81
	75,000 CY		\$23.40		\$22.33		\$19.69		\$18.93		\$17.97		\$16.64		\$23.37		\$26.05
	50,000 CY		\$31.09		\$29.50		\$20.99		\$18.48		\$16.98		\$16.09		\$31.05		\$37.54
	26,000 CY		\$33.05		\$30.58		\$26.39		\$25.08		\$23.82		\$22.08		\$32.98		\$39.50
NF Stony Brook Harbor	100,000 CY	47.5	\$20.25	36.8	\$17.68	18.8	\$15.88	12.7	\$15.27	9.4	\$14.88	14.3	\$15.43	65.8	\$23.05	74.7	\$23.65
	75,000 CY		\$22.33		\$20.91		\$18.51		\$17.69		\$17.17		\$17.91		\$24.07		\$24.86
	50,000 CY		\$29.50		\$26.08		\$17.46		\$16.72		\$16.33		\$16.92		\$32.27		\$35.23
	26,000 CY		\$30.58		\$28.23		\$24.43		\$23.49		\$22.85		\$23.74		\$34.82		\$37.10
Port Jefferson Harbor	250,000 CY	43.5	\$15.48	32.7	\$13.45	14.0	\$11.92	9.5	\$11.56	8.4	\$11.47	16.6	\$12.13	68.0	\$17.28	70.7	\$17.71
	100,000 CY		\$19.05		\$17.27		\$15.40		\$14.90		\$14.68		\$15.66		\$23.20		\$23.38
	75,000 CY		\$21.80		\$20.36		\$17.87		\$17.20		\$16.91		\$18.21		\$24.27		\$24.51
	50,000 CY		\$28.70		\$23.62		\$16.88		\$16.34		\$16.21		\$17.19		\$33.00		\$33.90
	26,000 CY		\$29.65		\$27.44		\$23.69		\$22.88		\$22.46		\$24.09		\$35.38		\$36.08
Mattituck Habror	100,000 CY	23.8	\$16.38	14.2	\$15.42	15.5	\$15.55	20.1	\$16.01	26.3	\$16.63	36.5	\$17.65	87.7	\$25.16	52.6	\$21.35
	75,000 CY		\$19.17		\$17.89		\$18.07		\$18.68		\$19.51		\$20.87		\$26.36		\$22.90
	50,000 CY		\$19.27		\$16.90		\$17.06		\$17.64		\$20.37		\$25.90		\$37.77		\$30.35
	26,000 CY		\$25.49		\$23.72		\$23.92		\$24.64		\$26.07		\$28.17		\$39.94		\$31.75
NF Plum Gut Harbor (USDA)	26,000 CY	7.6	\$22.15	6.4	\$21.69	25.8	\$25.95	31.5	\$27.21	38.5	\$28.56	49.5	\$31.04	97.8	\$41.88	35.2	\$27.92
	26,000 CY	3.9	\$20.73	14.6	\$23.78	34.7	\$27.83	40.4	\$28.94	47.4	\$30.55	58.4	\$33.09	110.4	\$44.31	27.6	\$26.37
NF Silver Eel Harbor, Fishers island, NY	26,000 CY	2.2	\$20.08	12.9	\$23.52	33.0	\$27.50	38.7	\$28.60	45.7	\$30.16	56.7	\$32.70	108.7	\$43.98	29.0	\$26.69

Navigation Project or Harbor	Typical CY Project	Outer Continental Shelf Site - Block Channel		Outer Continental Shelf Site - Block Canyon		Upland Disposal Sites - Truck			Upland Disposal Site Haul by Rail to Site In Eastern PA		In-Harbor CAD Cell Disposal		Distance Miles	Cost per Cubic Yard
		Distance N. Miles	Cost per Cubic Yard	Distance N. Miles	Cost per Cubic Yard	1-Mile Haul Distance Cost per Cubic Yard	10-Mile Haul Distance Cost per Cubic Yard	25-Mile Haul Distance Cost per Cubic Yard	Distance Miles	Cost per Cubic Yard	Distance Miles	Cost per Cubic Yard		
Glen Cove Creek	100,000 CY	89.8	\$25.47	140.5	\$34.10	\$32.18	\$36.12	\$40.06	187.0	\$69.58		\$33.60		
	75,000 CY		\$26.64		\$32.03	\$36.21	\$40.16	\$44.11		\$73.61		\$38.40		
	50,000 CY		\$37.98		\$45.08	\$38.59	\$42.59	\$46.59		\$75.99		\$37.92		
	26,000 CY		\$40.35		\$50.10	\$51.45	\$55.47	\$59.49		\$88.85		\$50.77		
NF Oyster Bay Harbor	100,000 CY	84.8	\$24.72	135.5	\$33.10	\$32.18	\$36.12	\$40.06	192.0	\$70.58		\$33.60		
	75,000 CY		\$25.97		\$31.70	\$36.21	\$40.16	\$44.11		\$74.61		\$38.40		
	50,000 CY		\$37.48		\$44.33	\$38.59	\$42.59	\$46.59		\$76.99		\$37.92		
	26,000 CY		\$39.38		\$49.13	\$51.45	\$55.47	\$59.49		\$89.85		\$50.77		
NF Cold Spring Harbor	26,000 CY	85.1	\$39.44	135.8	\$49.19	\$51.45	\$55.47	\$59.49	195.0	\$90.45		\$50.77		
Huntington Harbor	100,000 CY	81.0	\$24.15	131.7	\$32.34	\$32.18	\$36.12	\$40.06	198.0	\$71.78		\$33.60		
	75,000 CY		\$25.47		\$31.45	\$36.21	\$40.16	\$44.11		\$75.81		\$38.40		
	50,000 CY		\$37.10		\$43.76	\$38.59	\$42.59	\$46.59		\$78.19		\$37.92		
	26,000 CY		\$38.65		\$48.40	\$51.45	\$55.47	\$59.49		\$91.05		\$50.77		
Northport Harbor	100,000 CY	82.0	\$24.30	132.7	\$32.54	\$32.18	\$36.12	\$40.06	204.0	\$72.98		\$33.60		
	75,000 CY		\$25.60		\$31.51	\$36.21	\$40.16	\$44.11		\$77.01		\$38.40		
	50,000 CY		\$37.20		\$43.91	\$38.59	\$42.59	\$46.59		\$79.39		\$37.92		
	26,000 CY		\$38.85		\$48.60	\$51.45	\$55.47	\$59.49		\$92.25		\$50.77		
NF Stony Brook Harbor	100,000 CY	76.6	\$23.77	127.3	\$31.46	\$32.18	\$36.12	\$40.06	215.0	\$75.18		\$33.60		
	75,000 CY		\$25.03		\$31.15	\$36.21	\$40.16	\$44.11		\$79.21		\$38.40		
	50,000 CY		\$35.87		\$44.60	\$38.59	\$42.59	\$46.59		\$81.59		\$37.92		
	26,000 CY		\$37.59		\$47.56	\$51.45	\$55.47	\$59.49		\$94.45		\$50.77		
Port Jefferson Harbor	250,000 CY	69.4	\$17.50	120.1	\$23.62	\$26.27	\$30.13	\$34.00	220.0	\$70.27		\$26.88		
	100,000 CY		\$23.29		\$30.02	\$32.18	\$36.12	\$40.06		\$76.18		\$33.60		
	75,000 CY		\$24.39		\$30.67	\$36.21	\$40.16	\$44.11		\$80.21		\$38.40		
	50,000 CY		\$33.47		\$42.02	\$38.59	\$42.59	\$46.59		\$82.59		\$37.92		
	26,000 CY		\$35.74		\$46.17	\$51.45	\$55.47	\$59.49		\$95.45		\$50.77		
Mattituck Habror	100,000 CY	52.0	\$21.27	102.7	\$27.41	\$32.18	\$36.12	\$40.06	249.0	\$81.98		\$33.60		
	75,000 CY		\$22.84		\$28.36	\$36.21	\$40.16	\$44.11		\$86.01		\$38.40		
	50,000 CY		\$30.27		\$39.41	\$38.59	\$42.59	\$46.59		\$88.39		\$37.92		
	26,000 CY		\$31.62		\$42.83	\$51.45	\$55.47	\$59.49		\$101.25		\$50.77		
NF Plum Gut Harbor (USDA)	26,000 CY	36.6	\$28.19	87.3	\$39.87	\$51.45	\$55.47	\$59.49	268.0	\$105.05		\$50.77		
Hay Harbor, Fishers Island, NY	26,000 CY	36.5	\$28.17	87.2	\$39.85	\$51.45	na	na	268.0	\$105.05		\$50.77		
NF Silver Eel Harbor, Fishers island, NY	26,000 CY	34.4	\$27.77	85.1	\$39.44	\$51.45	na	na	268.0	\$105.05		\$50.77		

Cost Estimates

Open-Water Disposal Template

Haul Distance (Nautical Miles)	26,000 CY Project	50,000 CY Project	75,000 CY Project	100,000 CY Project	250,000 CY Project	500,000 CY Project	750,000 CY Project	1,000,000 CY Project
5	\$21.15	\$15.80	\$16.00	\$14.00	\$11.20	\$10.80	\$8.00	\$7.80
10	\$23.08	\$16.40	\$17.33	\$15.00	\$11.60	\$11.20	\$8.27	\$8.00
20	\$24.62	\$17.60	\$18.67	\$16.00	\$12.40	\$11.80	\$9.07	\$8.90
30	\$26.92	\$22.00	\$20.00	\$17.00	\$12.80	\$12.00	\$10.27	\$10.10
40	\$28.85	\$28.00	\$21.33	\$18.00	\$15.20	\$14.20	\$11.07	\$10.90
50	\$31.15	\$30.00	\$22.67	\$21.00	\$16.00	\$15.00	\$12.40	\$12.20
65	\$34.62	\$32.00	\$24.00	\$23.00	\$16.80	\$15.80	\$13.73	\$13.60
80	\$38.46	\$37.00	\$25.33	\$24.00	\$19.20	\$18.60	\$15.20	\$15.10
100	\$42.31	\$39.00	\$28.00	\$27.00	\$20.80	\$21.60	\$17.20	\$17.20
120	\$46.15	\$42.00	\$30.67	\$30.00	\$23.60	\$24.60	\$19.20	\$19.15
140	\$50.00	\$45.00	\$32.00	\$34.00	\$26.80	\$27.60	\$21.27	\$21.20
Upland	\$17.98	\$13.43	\$13.60	\$11.90	\$9.52	\$9.18	\$6.80	\$6.63
CAD Cell 5 x 2.35	\$50.77	\$37.92	\$38.40	\$33.60	\$26.88	\$25.92	\$19.20	\$18.72

Assumptions:

All Mechanical Bucket Dredging with Split Hull Scows

Material is Sandy Silt to Silty Sand

Average Depth of Cut in Feet	2	2	3	3	3	3	4	4
Acres Dredge Area	8	15	19	25	52	103	116	155
Overdepth as % of Above Total	35%	35%	30%	30%	25%	25%	20%	20%
OD	9,000	18,000	23,000	30,000	63,000	125,000	150,000	200,000
Cut	17,000	32,000	52,000	70,000	187,000	375,000	600,000	800,000
Vary # of Tugs								
Vary # of Scows	2000 CY	2000 CY	3000 CY	3000 CY	4000 CY	4000 CY	4000 CY	4000 CY
Vary Bucket Size (CY)	10	10	10	10	21	21	26	26

UPLAND DISPOSAL COSTS

	26,000 CY Project	50,000 CY Project	75,000 CY Project	100,000 CY Project	250,000 CY Project	500,000 CY Project	750,000 CY Project	1,000,000 CY Project
<u>Projects up to 1 Mile Haul</u>								
Mobilization/Demobilization	\$150,000	\$170,000	\$190,000	\$210,000	\$265,000	\$320,000	\$400,000	\$480,000
Dredging - Maintenance	\$467,500	\$671,500	\$1,020,000	\$1,190,000	\$2,380,000	\$4,590,000	\$5,100,000	\$6,630,000
Diking & Dewatering	\$78,000	\$125,000	\$187,500	\$200,000	\$500,000	\$875,000	\$1,312,500	\$1,500,000
Rehandling & Hauling	\$78,000	\$150,000	\$225,000	\$300,000	\$750,000	\$1,500,000	\$2,250,000	\$3,000,000
Disposal Fees & Real Estate	\$130,000	\$250,000	\$375,000	\$500,000	\$1,250,000	\$2,500,000	\$3,750,000	\$5,000,000
Contingencies	<u>\$116,025</u>	<u>\$167,475</u>	<u>\$243,375</u>	<u>\$285,000</u>	<u>\$584,250</u>	<u>\$1,092,750</u>	<u>\$1,359,375</u>	<u>\$1,741,500</u>
Subtotal	\$1,019,525	\$1,533,975	\$2,240,875	\$2,685,000	\$5,729,250	\$10,877,750	\$14,171,875	\$18,351,500
Engineering & Design	\$120,879	\$136,359	\$153,431	\$162,263	\$218,231	\$292,555	\$358,438	\$442,030
Supervision & Administration	<u>\$197,343</u>	<u>\$259,077</u>	<u>\$321,496</u>	<u>\$370,350</u>	<u>\$619,279</u>	<u>\$999,609</u>	<u>\$1,208,750</u>	<u>\$1,359,605</u>
TOTAL	\$1,337,747	\$1,929,411	\$2,715,802	\$3,217,613	\$6,566,760	\$12,169,914	\$15,739,063	\$20,153,135
TOTAL \$/CY	\$51.45	\$38.59	\$36.21	\$32.18	\$26.27	\$24.34	\$20.99	\$20.15
	26,000 CY Project	50,000 CY Project	75,000 CY Project	100,000 CY Project	250,000 CY Project	500,000 CY Project	750,000 CY Project	1,000,000 CY Project
<u>Projects with 10 Mile Haul</u>								
Mobilization/Demobilization	\$150,000	\$170,000	\$190,000	\$210,000	\$265,000	\$320,000	\$400,000	\$480,000
Dredging - Maintenance	\$467,500	\$671,500	\$1,020,000	\$1,190,000	\$2,380,000	\$4,590,000	\$5,100,000	\$6,630,000
Diking & Dewatering	\$78,000	\$125,000	\$187,500	\$200,000	\$500,000	\$875,000	\$1,312,500	\$1,500,000
Rehandling & Hauling	\$156,000	\$300,000	\$450,000	\$600,000	\$1,500,000	\$3,000,000	\$4,500,000	\$6,000,000
Disposal Fees & Real Estate	\$130,000	\$250,000	\$375,000	\$500,000	\$1,250,000	\$2,500,000	\$3,750,000	\$5,000,000
Contingencies	<u>\$127,725</u>	<u>\$189,975</u>	<u>\$277,125</u>	<u>\$330,000</u>	<u>\$696,750</u>	<u>\$1,317,750</u>	<u>\$1,696,875</u>	<u>\$2,191,500</u>
Subtotal	\$1,109,225	\$1,706,475	\$2,499,625	\$3,030,000	\$6,591,750	\$12,602,750	\$16,759,375	\$21,801,500
Engineering & Design	\$124,915	\$143,259	\$162,487	\$173,475	\$239,794	\$327,055	\$410,188	\$511,030
Supervision & Administration	<u>\$208,107</u>	<u>\$279,777</u>	<u>\$349,959</u>	<u>\$408,300</u>	<u>\$701,216</u>	<u>\$1,146,234</u>	<u>\$1,415,750</u>	<u>\$1,601,105</u>
TOTAL	\$1,442,247	\$2,129,511	\$3,012,071	\$3,611,775	\$7,532,760	\$14,076,039	\$18,585,313	\$23,913,635
TOTAL \$/CY	\$55.47	\$42.59	\$40.16	\$36.12	\$30.13	\$28.15	\$24.78	\$23.91

<u>Projects with 25 Mile Haul</u>	26,000 CY Project	50,000 CY Project	75,000 CY Project	100,000 CY Project	250,000 CY Project	500,000 CY Project	750,000 CY Project	1,000,000 CY Project
Mobilization/Demobilization	\$150,000	\$170,000	\$190,000	\$210,000	\$265,000	\$320,000	\$400,000	\$480,000
Dredging - Maintenance	\$467,500	\$671,500	\$1,020,000	\$1,190,000	\$2,380,000	\$4,590,000	\$5,100,000	\$6,630,000
Diking & Dewatering	\$78,000	\$125,000	\$187,500	\$200,000	\$500,000	\$875,000	\$1,312,500	\$1,500,000
Rehandling & Hauling	\$234,000	\$450,000	\$675,000	\$900,000	\$2,250,000	\$4,500,000	\$6,750,000	\$9,000,000
Disposal Fees & Real Estate	\$130,000	\$250,000	\$375,000	\$500,000	\$1,250,000	\$2,500,000	\$3,750,000	\$5,000,000
Contingencies	<u>\$139,425</u>	<u>\$212,475</u>	<u>\$310,875</u>	<u>\$375,000</u>	<u>\$809,250</u>	<u>\$1,542,750</u>	<u>\$2,034,375</u>	<u>\$2,641,500</u>
Subtotal	\$1,198,925	\$1,878,975	\$2,758,375	\$3,375,000	\$7,454,250	\$14,327,750	\$19,346,875	\$25,251,500
Engineering & Design	\$128,952	\$150,159	\$171,543	\$184,688	\$261,356	\$361,555	\$461,938	\$580,030
Supervision & Administration	<u>\$218,871</u>	<u>\$300,477</u>	<u>\$378,421</u>	<u>\$446,250</u>	<u>\$783,154</u>	<u>\$1,292,859</u>	<u>\$1,622,750</u>	<u>\$1,842,605</u>
TOTAL	\$1,546,748	\$2,329,611	\$3,308,339	\$4,005,938	\$8,498,760	\$15,982,164	\$21,431,563	\$27,674,135
TOTAL \$/CY	\$59.49	\$46.59	\$44.11	\$40.06	\$34.00	\$31.96	\$28.58	\$27.67

Upland Disposal by Rail Haul to Pennsylvania

Distances to Scranton-Wilkes Barre	Railroad	Haul Cost/CY	Plus Dredging/Haul Costs/CY for 1-Mile Truck							
			26,000 CY	50,000 CY	75,000 CY	100,000 CY	250,000 CY	500,000 CY	750,000 CY	1,000,000 CY
Watch Hill Cove	286	\$57.20	\$108.65	\$95.79	\$93.41	\$89.38	\$83.47	\$81.54	\$78.19	\$77.35
Westerly RI	282	\$56.40	\$107.85	\$94.99	\$92.61	\$88.58	\$82.67	\$80.74	\$77.39	\$76.55
Stonington Hbr	275	\$55.00	\$106.45	\$93.59	\$91.21	\$87.18	\$81.27	\$79.34	\$75.99	\$75.15
Mystic Harbor CT	273	\$54.60	\$106.05	\$93.19	\$90.81	\$86.78	\$80.87	\$78.94	\$75.59	\$74.75
NF Noank Harbor	272	\$54.40	\$105.85	\$92.99	\$90.61	\$86.58	\$80.67	\$78.74	\$75.39	\$74.55
NF Mumford-Groton	272	\$54.40	\$105.85	\$92.99	\$90.61	\$86.58	\$80.67	\$78.74	\$75.39	\$74.55
NF Pine Island Bay	271	\$54.20	\$105.65	\$92.79	\$90.41	\$86.38	\$80.47	\$78.54	\$75.19	\$74.35
New London CT	268	\$53.60	\$105.05	\$92.19	\$89.81	\$85.78	\$79.87	\$77.94	\$74.59	\$73.75
Niantic Bay	264	\$52.80	\$104.25	\$91.39	\$89.01	\$84.98	\$79.07	\$77.14	\$73.79	\$72.95
Eightmile River	259	\$51.80	\$103.25	\$90.39	\$88.01	\$83.98	\$78.07	\$76.14	\$72.79	\$71.95
Saybrook	254	\$50.80	\$102.25	\$89.39	\$87.01	\$82.98	\$77.07	\$75.14	\$71.79	\$70.95
Essex Harbor	257	\$51.40	\$102.85	\$89.99	\$87.61	\$83.58	\$77.67	\$75.74	\$72.39	\$71.55
NF Indiantown Hbr	253	\$50.60	\$102.05	\$89.19	\$86.81	\$82.78	\$76.87	\$74.94	\$71.59	\$70.75
Patchogue River	250	\$50.00	\$101.45	\$88.59	\$86.21	\$82.18	\$76.27	\$74.34	\$70.99	\$70.15
Duck Island Hbr	250	\$50.00	\$101.45	\$88.59	\$86.21	\$82.18	\$76.27	\$74.34	\$70.99	\$70.15
Clinton Harbor	246	\$49.20	\$100.65	\$87.79	\$85.41	\$81.38	\$75.47	\$73.54	\$70.19	\$69.35
Guilford Harbor	242	\$48.40	\$99.85	\$86.99	\$84.61	\$80.58	\$74.67	\$72.74	\$69.39	\$68.55
Stony Creek	238	\$47.60	\$99.05	\$86.19	\$83.81	\$79.78	\$73.87	\$71.94	\$68.59	\$67.75
NF Pine Orchard H.	237	\$47.40	\$98.85	\$85.99	\$83.61	\$79.58	\$73.67	\$71.74	\$68.39	\$67.55
Branford Harbor	234	\$46.80	\$98.25	\$85.39	\$83.01	\$78.98	\$73.07	\$71.14	\$67.79	\$66.95
NF Farm River	230	\$46.00	\$97.45	\$84.59	\$82.21	\$78.18	\$72.27	\$70.34	\$66.99	\$66.15
New Haven	226	\$45.20	\$96.65	\$83.79	\$81.41	\$77.38	\$71.47	\$69.54	\$66.19	\$65.35
West River	223	\$44.60	\$96.05	\$83.19	\$80.81	\$76.78	\$70.87	\$68.94	\$65.59	\$64.75
Milford Harbor	217	\$43.40	\$94.85	\$81.99	\$79.61	\$75.58	\$69.67	\$67.74	\$64.39	\$63.55
Housatonic River	214	\$42.80	\$94.25	\$81.39	\$79.01	\$74.98	\$69.07	\$67.14	\$63.79	\$62.95
Bridgeport	212	\$42.40	\$93.85	\$80.99	\$78.61	\$74.58	\$68.67	\$66.74	\$63.39	\$62.55
Black Rock Hbr	210	\$42.00	\$93.45	\$80.59	\$78.21	\$74.18	\$68.27	\$66.34	\$62.99	\$62.15
Southport Harbor	207	\$41.40	\$92.85	\$79.99	\$77.61	\$73.58	\$67.67	\$65.74	\$62.39	\$61.55
Westport Harbor	203	\$40.60	\$92.05	\$79.19	\$76.81	\$72.78	\$66.87	\$64.94	\$61.59	\$60.75
Norwalk Harbor	199	\$39.80	\$91.25	\$78.39	\$76.01	\$71.98	\$66.07	\$64.14	\$60.79	\$59.95
Wilson Point H.	198	\$39.60	\$91.05	\$78.19	\$75.81	\$71.78	\$65.87	\$63.94	\$60.59	\$59.75
Fivemile River	196	\$39.20	\$90.65	\$77.79	\$75.41	\$71.38	\$65.47	\$63.54	\$60.19	\$59.35

		Railroad	Plus Dredging/Haul Costs/CY for 1-Mile Truck							
Distances to Scranton-Wilkes Barre		Haul Cost/CY	26,000 CY	50,000 CY	75,000 CY	100,000 CY	250,000 CY	500,000 CY	750,000 CY	1,000,000 CY
NF Darien River	195	\$39.00	\$90.45	\$77.59	\$75.21	\$71.18	\$65.27	\$63.34	\$59.99	\$59.15
Westcott Cove	194	\$38.80	\$90.25	\$77.39	\$75.01	\$70.98	\$65.07	\$63.14	\$59.79	\$58.95
Stamford Hbr	193	\$38.60	\$90.05	\$77.19	\$74.81	\$70.78	\$64.87	\$62.94	\$59.59	\$58.75
Mianus River	191	\$38.20	\$89.65	\$76.79	\$74.41	\$70.38	\$64.47	\$62.54	\$59.19	\$58.35
Greenwich CT	189	\$37.80	\$89.25	\$76.39	\$74.01	\$69.98	\$64.07	\$62.14	\$58.79	\$57.95
Port Chester H	186	\$37.20	\$88.65	\$75.79	\$73.41	\$69.38	\$63.47	\$61.54	\$58.19	\$57.35
Milton Harbor	182	\$36.40	\$87.85	\$74.99	\$72.61	\$68.58	\$62.67	\$60.74	\$57.39	\$56.55
Mamaroneck NY	181	\$36.20	\$87.65	\$74.79	\$72.41	\$68.38	\$62.47	\$60.54	\$57.19	\$56.35
Larchmont Hbr	180	\$36.00	\$87.45	\$74.59	\$72.21	\$68.18	\$62.27	\$60.34	\$56.99	\$56.15
Echo Bay	179	\$35.80	\$87.25	\$74.39	\$72.01	\$67.98	\$62.07	\$60.14	\$56.79	\$55.95
New Rochelle H.	177	\$35.40	\$86.85	\$73.99	\$71.61	\$67.58	\$61.67	\$59.74	\$56.39	
Eastchester R.	174	\$34.80	\$86.25	\$73.39	\$71.01	\$66.98	\$61.07	\$59.14	\$55.79	\$54.95
Westchester R.	171	\$34.20	\$85.65	\$72.79	\$70.41	\$66.38	\$60.47	\$58.54	\$55.19	\$54.35
Bronx River	169	\$33.80	\$85.25	\$72.39	\$70.01	\$65.98	\$60.07	\$58.14	\$54.79	\$53.95
Flushing Bay	174	\$34.80	\$86.25	\$73.39	\$71.01	\$66.98	\$61.07	\$59.14	\$55.79	\$54.95
Little Neck Bay	179	\$35.80	\$87.25	\$74.39	\$72.01	\$67.98	\$62.07	\$60.14	\$56.79	\$55.95
NF Manhasset Bay	181	\$36.20	\$87.65	\$74.79	\$72.41	\$68.38	\$62.47	\$60.54	\$57.19	\$56.35
NF Port Washington	183	\$36.60	\$88.05	\$75.19	\$72.81	\$68.78	\$62.87	\$60.94	\$57.59	\$56.75
Hempstead Hbr	185	\$37.00	\$88.45	\$75.59	\$73.21	\$69.18	\$63.27	\$61.34	\$57.99	\$57.15
Glen Cove Creek	187	\$37.40	\$88.85	\$75.99	\$73.61	\$69.58	\$63.67	\$61.74	\$58.39	\$57.55
NF Oyster Bay	192	\$38.40	\$89.85	\$76.99	\$74.61	\$70.58	\$64.67	\$62.74	\$59.39	\$58.55
NF Cold Spring Hbr	195	\$39.00	\$90.45	\$77.59	\$75.21	\$71.18	\$65.27	\$63.34	\$59.99	\$59.15
Huntington Hbr	198	\$39.60	\$91.05	\$78.19	\$75.81	\$71.78	\$65.87	\$63.94	\$60.59	\$59.75
Northport Harbor	204	\$40.80	\$92.25	\$79.39	\$77.01	\$72.98	\$67.07	\$65.14	\$61.79	\$60.95
NF Stony Brook H.	215	\$43.00	\$94.45	\$81.59	\$79.21	\$75.18	\$69.27	\$67.34	\$63.99	\$63.15
Port Jefferson	220	\$44.00	\$95.45	\$82.59	\$80.21	\$76.18	\$70.27	\$68.34	\$64.99	\$64.15
Mattituck Harbor	249	\$49.80	\$101.25	\$88.39	\$86.01	\$81.98	\$76.07	\$74.14	\$70.79	\$69.95
NF Plum Gut Harbor	268	\$53.60	\$105.05	\$92.19	\$89.81	\$85.78	\$79.87	\$77.94	\$74.59	\$73.75
NF Silver Eel Cove	268	\$53.60	\$105.05	\$92.19	\$89.81	\$85.78	\$79.87	\$77.94	\$74.59	\$73.75
Hay-West Harbor	268	\$53.60	\$105.05	\$92.19	\$89.81	\$85.78	\$79.87	\$77.94	\$74.59	\$73.75

Note: Uses Upland 1-Mile Truck Haul as Basis and Adds Rail Cost

1 CY = 1.8225 Tons
\$30/Ton = \$54.68 CY
Say \$60.00 / CY/300 Mi

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